

a second communication link coupling the second storage system to the CPU, wherein the second communication link extends between the first and second storage systems so that the second storage system is coupled to the CPU via the first storage system;

a third storage system;

a third communication link coupling the third storage system to the CPU, wherein the third communication link extends between the first and third storage systems so that the third storage system is coupled to the CPU via the first storage system; and

a mirroring controller, responsive to the information being written from the CPU to the first storage system, to mirror at least some of the information written from the CPU to the first storage system in both the second and third storage systems ;

wherein the second and third communication links each comprises a network cloud that is shared by the first, second and third storage systems.

37. (Twice Amended) A method of operating a computer system that includes a central processing unit (CPU), a first communication link, a first storage system coupled to the CPU via the first communication link to store information written from the CPU, a second storage system, a second communication link coupling the second storage system to the CPU and extending between the first and second storage systems so that the second storage system is coupled to the CPU via the first storage system, a third storage system, and a third communication link coupling the third storage system to the CPU and extending between the first and third storage systems so that the third storage system is coupled to the CPU via the first storage system, wherein each of the second and third communication links is formed through a network cloud that is shared by the first, second and third storage systems, the method comprising a step of:

(A) in response to the information being written from the CPU to the first storage system, mirroring at least some of the information written from the CPU to the first storage system in both the second and third storage systems by transferring the at least some of the information over the second and third communication links through the network cloud.

38. (Amended) The method of claim 37, wherein step (A) includes a step[s] of:

52 [forming each of the second and third communication links through a network cloud that is shared by the first, second and third storage systems; and]

multicasting the at least some of the information stored by the CPU in the first storage device to the second and third storage systems over the network cloud.

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56. (Twice Amended) A computer system comprising:

a central processing unit (CPU);

a first storage system that is coupled to the CPU to store information written from the CPU;

a second storage system;

53 at least one communication link coupling the second storage system to the CPU so that the CPU can store information in the second storage system, the at least one communication link being selected from the group consisting of an [Ethernet link, an asynchronous transfer mode (ATM) link, an FDDI link and a fibre channel link] intranet and the Internet, wherein the at least one communication link extends between the first and second storage systems such that the second storage system is coupled to the CPU via the first storage system; and

a mirroring controller, responsive to the information being written from the CPU to the first storage system, to mirror at least some of the information written from the CPU to the first storage system in the second storage system by transferring the at least some of the information over the at least one communication link.

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62. (Amended) A computer system comprising:

a central processing unit (CPU);

54 a first storage system that is coupled to the CPU to store information written from the CPU;

a second storage system;

at least one communication link coupling the second storage system to the CPU, the at least one communication link including a network cloud that is shared with at least one other resource so that no portion of the network cloud is dedicated exclusively to transferring information between the CPU and the second storage system, wherein the at least one communication link extends between the first and second storage systems such that the second

34 storage system is coupled to the CPU via the first storage system, and wherein the at least one communication link includes a plurality of communication paths from the CPU to the network cloud, so that a plurality of packets of the information can be transferred from the CPU to the second storage system in parallel through the network cloud; and

a mirroring controller, responsive to the information being written from the CPU to the first storage system, to mirror at least some of the information written from the CPU to the first storage system in the second storage system by transferring the at least some of the information through the network cloud.

35 65. (Amended) A method of mirroring information stored in a computer system comprising a central processing unit (CPU), a first storage system that is coupled to the CPU to store information written from the CPU, and a second storage system coupled to the CPU by at least one communication link, the at least one communication link including a network cloud that is shared with at least one other resource so that no portion of the network cloud is dedicated exclusively to coupling the second storage system to the CPU, and wherein the at least one communication link extends between the first and second storage systems such that the second storage system is coupled to the CPU via the first storage system, the method comprising a step of:

A) in response to the information being written from the CPU to the first storage system, transmitting at least some of the information written from the CPU to the first storage system over at least two parallel paths into the network cloud with the second storage system designated as a destination for the at least some of the information, so that the at least some of the information can be transferred through the network cloud and mirrored in the second storage system.

66. (Amended) A computer system capable of mirroring information in a remotely disposed target storage system that is coupled to the computer system via at least one communication link that includes a network cloud that is shared with at least one other resource, the computer system comprising:

a central processing unit (CPU) coupled to the network cloud; and

a source storage system that is coupled to the CPU to store information written from the